ABSTRACT OF THE DISCLOSURE

A thin film hydrogen getter and EMI shielding are provided for protecting GaAs circuitry sealed in an hermetic package. The thin film getter comprises a multilayer metal film that is deposited by vacuum evaporation techniques onto a conductive metal, such as aluminum or copper, that serves as the EMI shielding. The conductive layer is first formed on an interior surface. The multilayer hydrogen getter film comprises (1) a titanium film and (2) a palladium film that is deposited on the titanium film. Both the titanium and the palladium are deposited during the same coating process run, thereby preventing the titanium from being oxidized. The palladium continues to prevent the titanium from being oxidized once the getter is exposed to the atmosphere. However, hydrogen is easily able to diffuse through the palladium into the titanium where it is chemically bound up, since palladium is highly permeable to hydrogen.